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07/944,739 9/14/92

Kyle

1496-124A

EXAMINER

Jordan

ART UNIT

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1205

33

DATE MAILED:

EXAMINER INTERVIEW SUMMARY RECORD

All participants (applicant, applicant's representative, PTO personnel):

(1) Laurence Posorske (3) _____

(2) Kimberly Jordan (4) _____

Date of interview July 19, 1994

Type: ☐ Telephonic ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description: _____

Agreement ☒ was reached with respect to some or all of the claims in question. ☐ was not reached.

Claims discussed: all remaining in the case, 67-71, 73-86, 92-94

Identification of prior art discussed: none

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Claims 76, 85 and 86 will be amended by examiner's amendment (see attachment) to more clearly define the invention. The "consisting essentially of" terminology relates to the essential nature of the enriched oils to provide ARA, DHA and EPA in the expressed ratios but does not exclude substantial amounts of other components which do not alter the ~~amounts~~ ratios of ARA, DHA and EPA.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

Unless the paragraphs below have been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☐ It is not necessary for applicant to provide a separate record of the substance of the interview.

☐ Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action.

Examiner's Signature

U.S. Serial No. 07/944,739
PENDING CLAIMS AS OF 6/22/94

(0311.46418)

1
67. (Twice Amended) A process for supplementing infant formula with DHA and ARA which comprises:

(a) preparing an oil blend consisting essentially of a microbial oil enriched in DHA and a microbial oil enriched in ARA, wherein the DHA and ARA are in the form of triglycerides and the oils are blended to provide a ratio of about 2 to 12 parts ARA and about 1 to 5 parts DHA and the oil blend further provides an EPA:ARA ratio of about 1 part EPA to from about 5 to about 20 parts ARA, and

(b) adding said oil blend to said infant formula in sufficient amounts that the amounts of DHA, ARA and EPA in said formula are comparable to the amounts of DHA, ARA and EPA in human breast milk.

2 68. A process in accordance with claim 67, wherein the ARA-containing oil comprises at least about 20% ARA.

3 69. A process in accordance with claim 67, wherein the DHA-containing oil comprises at least about 25% DHA.

4 70. A process in accordance with claim 67, wherein the DHA-containing oil and the ARA-containing oil are added to the infant formula to provide a ratio of ARA:DHA ranging from about 3:1 to about 2:1.

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71. A process in accordance with claim ⁴70, wherein the DHA-containing oil and the ARA-containing oil are added to the infant formula to provide a ratio of ARA:DHA of about 2:1.

72. (Cancelled)

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73. A process in accordance with claim ¹67, wherein said ARA-containing oil is obtained by a process comprising cultivating *Pythium insidiosum* or *Mortierella alpina* under conditions which will induce the production of an oil enriched in ARA.

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74. A process in accordance with claim ¹67, wherein said DHA-containing oil is obtained by cultivating a DHA-producing species of *Cryptocodinium*.

8
75. (Twice Amended) A process for supplementing infant formula with DHA and ARA which consists essentially of blending a triglyceride oil enriched in DHA and a triglyceride oil enriched in ARA, wherein the oils are blended to provide an ARA:DHA:EPA ratio of from about 5 parts ARA and 1 part DHA to about 20 parts ARA and 10 parts DHA to about 1 part EPA, and adding said blend to infant formula in amounts sufficient to provide the infant formula with DHA, ARA and EPA in amounts comparable to the amounts of DHA, ARA and EPA in human breast milk.

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76. (Twice Amended) A process for supplementing infant formula with DHA and ARA which ^{consists essentially of} ~~comprises~~:

(a) obtaining a microbial oil enriched in DHA and blending it with a microbial oil enriched in ARA, wherein the DHA and ARA are in the form of triglycerides and the oils

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are blended to provide a ratio of about 2 to 12 parts ARA and about 1 to 5 parts DHA and the oil blend is free of EPA, and

(b) adding said oil blend to said infant formula in sufficient amounts that the amounts of DHA and ARA in said formula are comparable to the amounts of DHA and ARA in human breast milk.

¹⁰~~77~~. (Twice Amended) A composition consisting essentially of a blend of a microbial oil enriched in DHA and a microbial oil enriched in ARA, wherein said DHA and ARA are in the form of triglycerides and the oils are blended to provide an ARA:DHA:EPA ratio of from about 5 parts ARA and 1 part DHA to about 20 parts ARA and 10 parts DHA to about 1 part EPA.

¹¹~~78~~. A composition in accordance with claim ¹⁰~~77~~, wherein the microbial oil enriched in DHA comprises at least about 25% DHA.

¹²~~79~~. A composition in accordance with claim ¹⁰~~77~~, wherein the microbial oil enriched in ARA comprises at least about 20% ARA.

¹³~~80~~. (Twice Amended) A composition consisting essentially of a blend of a microbial oil enriched in DHA and a microbial oil enriched in ARA, wherein the oils are blended to provide a ratio of about 2 to 12 parts ARA and about 1 to 5 parts DHA.

¹⁴~~81~~. A composition in accordance with claim ¹³~~80~~, wherein the oils are blended to provide a ratio of ARA:DHA of about 2:1.

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¹⁵ 82. (Amended) A composition in accordance with claim ¹³ 80, wherein the amount of EPA is about one twentieth or less the amount of ARA.

¹⁶ 83. (Twice Amended) A composition in accordance with claim ¹³ 80, wherein the oil enriched in ARA was produced by cultivating *Pythium insidiosum* or *Mortierella alpina* under conditions which will induce the production of an oil enriched in ARA.

¹⁷ 84. (Amended) A composition in accordance with claim ¹³ 80, wherein the oil enriched in DHA was produced by cultivating a DHA-producing species of *Cryptothecodinium* under DHA-producing conditions.

¹⁸ 85. A composition comprising a blend of triglyceride oils, wherein said blend consists essentially of ~~comprises~~ ARA, DHA and EPA in a ratio of about 20:10:1 to about 5:1:1.

¹⁹ 86. A composition comprising a blend of a microbial triglyceride oil enriched in ARA, and a microbial triglyceride oil enriched in DHA, wherein the ^{microbial triglyceride} oils are provided in amounts to provide a ratio of about 2 to 12 parts ARA and about 1 to 5 parts DHA and said oils further are free of EPA.

²⁰ 92. (Amended) Infant formula comprising a blend of a microbial oil enriched in DHA and a microbial oil enriched in ARA, wherein the DHA and ARA are in the form of triglycerides and the oils are blended to provide a ratio of about 2 to 12 parts ARA and about 1 to 5 parts DHA, the amount of DHA-containing oil and the amount of ARA-containing oil are sufficient to provide amounts of ARA and DHA comparable to the amounts of DHA and ARA

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in human breast milk and the formula further comprises EPA in a maximum amount of about one twentieth the amount of ARA.

21 93. (Amended) Infant formula consisting essentially of a blend of a microbial oil enriched in DHA and an oil enriched in GLA, wherein the amount of the DHA-containing oil is sufficient to provide an amount of DHA comparable to the amount in human breast milk and the amount of the GLA-containing oil is sufficient to provide GLA in an amount that, upon administration of the formula to an infant, can be converted in the infant's body to an amount of ARA comparable to the amount of ARA obtainable from human breast milk.

22 94. (Twice Amended) Infant formula comprising DHA and ARA, wherein the DHA and ARA are in the form of triglycerides, the ~~oils~~ ^{triglycerides} are blended to provide a ratio of about 2 to 12 parts ARA and about 1 to 5 parts DHA, and the amount of DHA-containing ~~oil~~ ^{triglyceride} and the amount of ARA-containing ~~oil~~ ^{triglyceride} are sufficient to provide amounts comparable to the amounts of DHA and ARA in human breast milk, wherein said formula is free of EPA.